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|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 09/747,492             | TRAUT, ERIC P.      |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Albert W Paladini      | 2125                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed on 12/21/00.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ The drawings filed on 21 December 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>1/31/02,3/19/02</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                      | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

  
 Albert W Paladini  
 Primary Examiner  
 Art Unit: 2125

***Reasons for Allowance***

1. The following is an examiner's statement of reasons for allowance: None of the references cited or the art searched disclose or teach alone or in combination the emulation process and the relationship between the guest computer system and the host computer system which includes decoupling the host operating system from the processor in the same relationship to the other steps recited in claims 1, 9, 17 and 19. .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

In line 2 of Claim 18, delete "19" and insert -17--.

***Relevant Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bright (5541862) discloses an emulator and digital system analyzer which minimizes the data interchange between the host computer and the tester during the process of testing by decoupling from the host computer the storage and retrieval of the test data that are used for generating the environment data signals to the unit under test and analyzing data signals emanating from the unit under test.

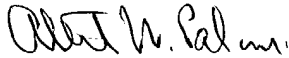
Tang (6298370) discloses a process of operating computer system utilizing host emulation in one process embodiment where the virtual signal processor is coupled to the host processor in task execution through the windows operating system and yet physically decoupled from the host to avoid a host-centric processing bottleneck of system imbalance.

Boyle (6668287) discloses an apparatus for generating an interrupt when a direct memory access by an I/O is desired by utilizing the fast morph host processor to accomplish direct memory access. The primary purposes of direct memory access are to decouple the central processor from the slower speed of devices on the I/O bus and to relieve the processor of the load required by direct memory access. However, it has been discovered that with fast microprocessors the time actually required to perform DMA operations in software can be reduced to a relatively small percentage of all operations. Consequently, by providing relatively simple hardware support for DMA operations a fast processor has the ability to practice direct memory access in software without significantly slowing its operations. Moreover, allowing the morph host processor in software to accomplish direct memory access eliminates many of the operations, which might otherwise be required to be implemented in hardware to maintain consistency without slowing the overall operation of the system.

4. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (703) 308-2005. The examiner can normally be reached from 7:30 to 3:30 PM on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (703) 308-0538. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
Albert W. Paladini  
Primary Examiner  
Art Unit 2125

June 21, 2004